

REMARKS

Claims 1-46 were pending in this application. Of those, claims 24 and 36 have been cancelled; claims 1, 6-8, 23, 25-26, 33, 38, and 45-46 have been amended; and claims 3-5 and 14-22 remain withdrawn.

Each of the independent claims (i.e., claims 1 and 33) has been amended to recite that the composition contains a surfactant which is present in an amount of less than 1% by weight relative to the total weight of the composition and that the surfactant and the ionic amphiphilic polymer are different. The support for this amendment can be found in the original claims 24 and 36, and in paragraphs [0009]-[0010] and [0080], which explain that the ionic amphiphilic polymer is intended to totally or partially replace the surfactants conventionally used in cosmetic emulsions in order to obtain an emulsion that has a better tensioning effect than those of the prior art, without loss of stability of the emulsion. Accordingly, no new matter has been introduced by these amendments.

Claims 6-8, 23, 25-26, 38, and 45-46 have been amended to more clearly define the present invention. No new matter has been introduced by these amendments as well.

Rejection based on 35 U.S.C. § 112

The Examiner has rejected claims 6 and 7 as being indefinite on the ground that there is insufficient antecedent basis for the limitation "said synthetic polymer" in claim 6. Applicants have amended the instant claims to recite "said tensioning polymer" rather than "said synthetic polymer."

The Examiner has also rejected claims 8-13 as being indefinite on the ground that "it is unclear how the limitation 'said amphiphilic polymer' of claims 8-10 are ionic when the requirement is for the amphiphilic polymer to be ionic." Applicants have also amended the instant claims to recite "said ionic amphiphilic polymer."

Therefore, Applicants request withdrawal of the rejection based on § 112.

Rejection based on 35 U.S.C. § 102

The Examiner has rejected claims 1, 2, 6, 8, 9, 13, and 33 as being anticipated by *Dubief et al.* (U.S. Patent 6,090,376). The Examiner has alleged that *Dubief et al.* discloses compositions comprising at least one grafted silicone polymer, amphiphilic polymer, water, and oil, and that "[e]xhibiting 'a retraction of isolated stratum corneum' . . . in water is a property/characteristic of the tensioning polymer and the tensioning polymer of *Dubief* would have the same property/characteristic." (Office Action, p.4). Thus, it appears that the rejection is based at least in part on the principle of inherency. Applicants respectfully traverse the rejection because the cited prior art fails to make a *prima facie* case of anticipation via inherency.

To establish a *prima facie* case of anticipation under § 102, each and every element set forth in the claim must be either expressly or inherently described in a single prior art reference and the identical invention must be shown in as complete detail as is contained in the claims. *In re Robertson*, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (reversing the inherent anticipation rejection on the basis that the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency).

In paragraph [0013] of the specification of the present application, the term "tensioning polymer" is defined as a polymer that produces, at a concentration of 7% by weight in water, a retraction of isolated stratum corneum of more than 1.5% at 30°C and under a relative humidity of 40%, as measured in accordance with the protocol set forth in Example 5.

Dubief, however, does not disclose the term "tensioning polymer" anywhere in the document and also fails to disclose or teach any grafted silicone polymers which possess inherent tensioning qualities as defined in the present application.

As it is clearly noted in the specification of the present application in paragraph [0023], not all grafted silicone polymers possess tensioning properties as Applicants have defined in the present application. Simply, just because something is a grafted silicone polymer does not necessarily mean that it has tensioning properties as defined in the present application. Therefore, Applicants respectfully submit that a *prima facie* case of inherent anticipation has not been established since the allegedly inherent characteristic, tensioning properties, do not necessarily flow from the teachings of grafted silicone polymers disclosed in *Dubief*.

In addition, as amended, now each of the independent claims, claims 1 and 33, include a limitation that a composition further comprises less than 1 weight % of surfactant, in addition to an amphiphilic polymer, with the proviso that the surfactant is different from the amphiphilic polymer. Although *Dubief* does mention the use of a surfactant as an additive, which can be optionally added to the composition (col.7, ll.5-7), it fails to teach that the composition must further comprise less than 1 weight % of surfactant, wherein the surfactant is different from the amphiphilic polymer. Because *Dubief* fails to teach the new limitation added to the independent claims, claims

1 and 33, either expressly or inherently, it does not anticipate the claimed invention.

Moreover, Applicants respectfully submit that the Examiner's rejection of claim 6 based on *Dubief* is also without merit. Claim 6 further defines that the "tensioning polymer" in the present invention is "in the form of interpenetrated polymer networks." According to the present application, the "interpenetrated polymer network" is defined as a blend of two interlaced polymers, obtained by simultaneous polymerization and/or crosslinking of two types of monomer, the blend obtained having a single glass transition temperature. ([0016] of the present application). However, *Dubief* is silent as to the polymers in the form of interpenetrated polymer networks.

A grafted silicone polymer disclosed in *Dubief* is not in the form of interpenetrated polymer networks, and therefore the Examiner's characterization that the tensioning polymer of *Dubief* is an interpenetrating polymer is factually incorrect.

Therefore, Applicants respectfully submit that the anticipation rejection based on *Dubief* with respect to claim 6 is improper.

Rejection based on 35 U.S.C. § 103(a)

The Examiner has rejected claims 1, 2, 6-13 and 23-42 as being obvious over *Dubief*. The Examiner has alleged that although *Dubief* does not teach the exact amounts of elements recited in the pending claims, the amounts recited in the pending claims would have been obvious because a "person of ordinary skill in the art would have good reason to use various components of the composition in amounts that would provide composition when applied to hair would effectively treat the hair as regards entangling/disentangling and smoothness and styling and feel." (Office Action, p.5). Applicants respectfully traverse the rejection.

The Supreme Court stated in *KSR Int'l Co. v. Teleflex Inc.* that "'rejections on obviousness cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.'" *KSR*, 82 U.S.P.Q. 2d at 1396. Accordingly, the Examiner must provide articulated reasons for the factual determinations underlying an asserted *prima facie* case of obviousness.

The present invention is directed to a composition suitable for topical application to skin, whereas *Dubief's* teaching is directed to exclusively hair styling compositions. More specifically, *Dubief* teaches a hair styling composition comprising a grafted silicone polymer and at least one ionic amphiphilic polymer to substantially improve the distribution of the composition along wet or dry hair fibres or to substantially improve the properties of smoothness (col.1, 11.23-31).

Dubief does not provide a reason/rationale for one of ordinary skill in the art to formulate the claimed invention, which is to obtain an emulsion for topical application to skin that has a better tensioning effect than those of the prior art, without loss of stability of the emulsion, comprising an aqueous phase, a fatty phase, a tensioning polymer, at least one ionic amphiphilic polymer, and less than 1 weight % of surfactant which is different from the amphiphilic polymer.

According to the specification of the present application, "the prior art tensioning agents are rarely formulated in the presence of oil, in particular in O/W or W/O emulsions, but more often are in the form of sera, i.e., gelled aqueous compositions. The reason for this is that it is generally observed that the efficacy of these compounds is greatly reduced in the presence of oil. . . . Now, the applicant has discovered, surprisingly, that the reduction of the tensioning power of lattices when they are formulated in

emulsion form is due to the presence of surfactants in these emulsions, and that by replacing these surfactants, totally or partially, with one or more ionic amphiphilic polymer(s), it is possible to obtain an emulsion that has a better tensioning effect than those of the prior art, without loss of stability of the emulsion." ([0006]-[0009] of the present application).

There is absolutely no teaching in *Dubief* that the presence of surfactants in an emulsion containing tensioning polymer greatly reduces the efficacy of these tensioning polymers, and that by replacing these surfactants, partially with one or more ionic amphiphilic polymer(s), in order to reduce the amount of surfactant in the emulsion to less than 1%, would maintain the efficacy of the tensioning polymer and the stability of the emulsion. In fact, the example disclosed in *Dubief* is an aqueous formulation, i.e., gelled aqueous formulation, (col.7, 1.58-col.9, 1.51), similar to the prior art formulations explained in the present application.

In supporting the obviousness rejection based on *Dubief*, the Examiner stated that a "person of ordinary skill in the art would have **good reason** to use various components of the composition in amounts that would provide composition when applied to hair would effectively treat the hair as regards entangling/disentangling and smoothness and styling and feel." (Office Action, p.5) (emphasis added). This is a mere conclusory statement, which cannot be used to support the legal conclusion of obviousness. Therefore, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness.

The Examiner rejected claims 1, 6, and 7 as being obvious over *Dubief* in view of *Nandagiri et al.* (U.S. Patent 5,362,486). The Examiner has alleged that the tensioning polymer of *Dubief* is a "grafted silicone interpenetrating polymer", but does not teach polyurethane and polyacrylic as

tensioning polymers as recited in claim 7. The Examiner has then alleged that since *Nandagiri* discloses composition comprising polyurethane-acrylate for bodifying hair (col.15, 11.13-62), it would have been obvious to use the polyurethane-acrylate tensioning interpenetrating polymer of *Nandagiri* in the composition of *Dubief* and "expect to have a composition for treating hair as it relates to body, feel, styling and disentangling of the hair." (Office Action, p.6). Applicants respectfully traverse.

As mentioned above, a grafted silicone polymer is not in the form of interpenetrated polymer networks, and therefore the Examiner's characterization that the tensioning polymer of *Dubief* is "a grafted silicone interpenetrating polymer" is factually incorrect. Moreover, *Nandagiri* does not teach polyurethane and polyacrylic as tensioning polymers as recited in claim 7. Instead *Nandagiri* discloses a composition suitable for treatment of hair (not for skin) comprising polyurethane-acrylate oligomers or prepolymers. (col.5, 11.49-53; col.15, 11.13-62). An oligomer consists of a finite number of monomer units, in contrast to a polymer. See en.wikipedia.org/wiki/oligomers. According to *Nandagiri*, these oligomers are polymerized in-situ, while the oligomer(s) is in contact with the hair, for in-situ formation (polymerization) of a polymer. (col.4, 11.15-19). Simply, these oligomers/prepolymers are not tensioning polymers. Because the combination of *Dubief* and *Nandagiri* fails to teach a tensioning polymer as defined in the present application, Applicants respectfully request the withdrawal of the rejection.

The Examiner rejected claims 1, 24 and 43-46 as being obvious over *Dubief* in view of *Dalko et al.* (U.S. Patent 6,846,812). The Examiner stated that *Dubief* teaches using a grafted silicone polymer to treat hair, but does not teach to treat/smooth wrinkled skin or restore skin tautness. Then, the

Examiner has alleged that *Dalko* teaches that compositions containing grafted silicone polymers are known to have the capability of fading out irregularities of the skin such as wrinkles and fine lines, and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the composition of *Dubief* to the skin and expect the composition to smooth wrinkled skin as taught by *Dalko*. Applicants respectfully traverse.

Dalko discloses that DHEA is known as an active agent having anti-aging properties, and teaches novel 7-oxo-DHEA derivatives which do not have any adverse hormonal side effects. *Dalko* also discloses a cosmetic composition comprising at least one 7-oxo-DHEA derivative and at least one other active agent, such as a tensioning agent.

However, there is absolutely no teaching in *Dalko* nor *Dubief* that the presence of surfactants in an emulsion containing tensioning polymer greatly reduces the efficacy of these tensioning polymers, and that by replacing these surfactants, partially with one or more ionic amphiphilic polymer(s), to reduce the amount of surfactant in the emulsion to less than 1% would maintain the efficacy of the tensioning polymer and the stability of the emulsion. In fact, there is no teaching in *Dalko* of the use of amphiphilic polymer at all.

Applicants respectfully submit that upon review of the totality of evidence, the claimed invention would not have been obvious over the collective teachings of the cited prior art references. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

Provisional Double Patenting

Claims 1, 2, 6-13 and 23-46 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-35; and 1-16 and 19-21 of

co-pending Application Nos. 10/982925 and 10/508007, respectively.

As this rejection is only provisional in nature, Applicants request that this rejection be held in abeyance until claims of co-pending Application Nos. 10/982925 and 10/508007 are allowed.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he/she telephone Applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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